Mobile Landscape and Opportunities

2015-03-10
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Agenda

- Current Mobile Landscape
- Mobile Choices
- Business Opportunities
- Application Demo
- Questions

Mobile Landscape

Mobile Sources of Digital Media

- > Mobile Web Web Browser as Client
- Mobile App Standalone Client

Mobile Landscape

2014 Milestones

- Mobile surpassed the desktop in digital media usage
- Mobile apps surpassed web usage

Mobile Devices and Platforms

- ➤ Devices: Smartphones and Tablets
- > Platforms: Two Vendors Control 96% of Market
 - Google Android 8800+ Devices
 - Apple iOS 17 Devices

Mobile Platforms - Smartphones

184+ million people in the U.S. own smartphones





Apple iOS

82% Global Market

15% Global Market

53% U.S. Market

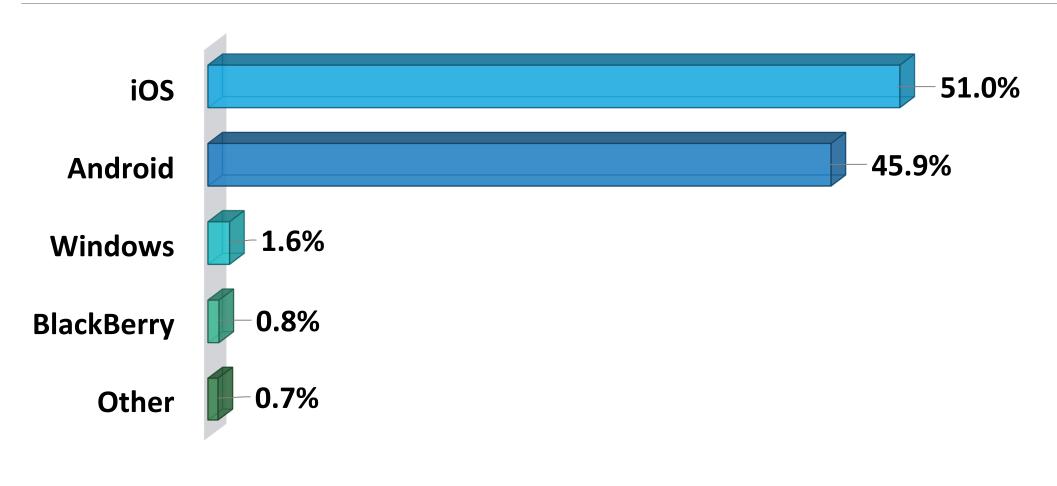
41% U.S. Market

\$254 Average Selling Price

\$657 Average Selling Price

Smartphones – Web Usage: U.S. Share %

Average Over Past 3 Months (Dec 2014 to Feb 2015)



Mobile Platforms - Tablets

70+ million people in the U.S. own tablets



Apple iOS

61% Global Market

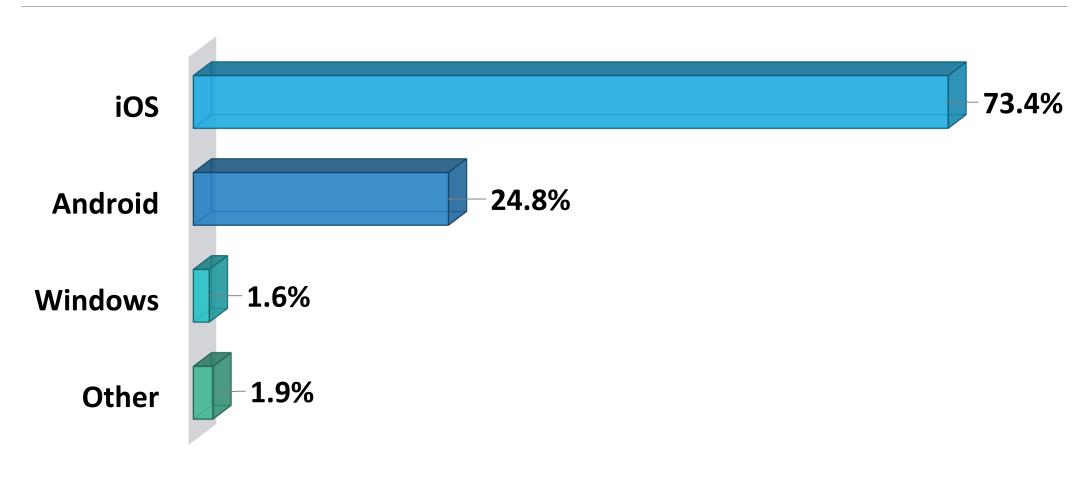
36% Global Market

9% Enterprise Market

90% Enterprise Market

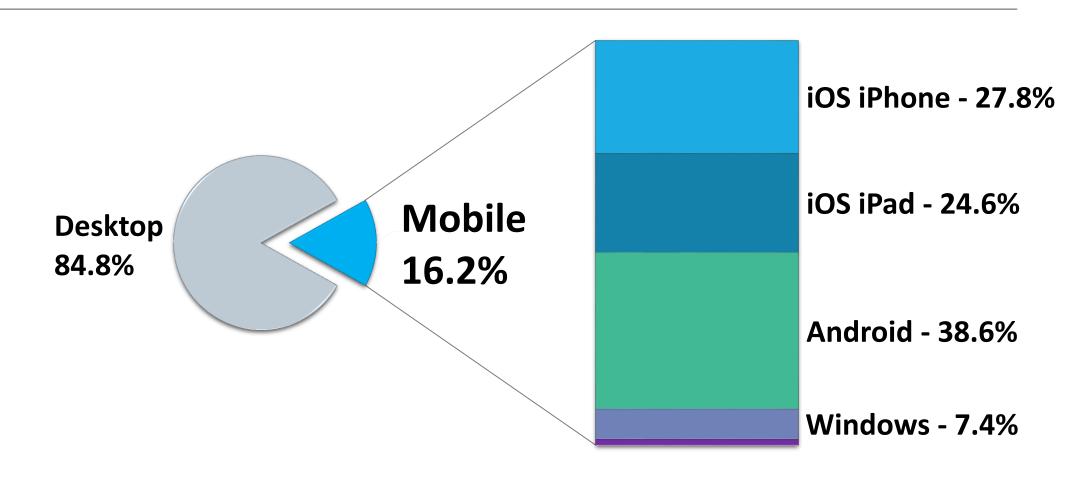
Tablets – Web Usage: U.S. Share %

Average Over Past 3 Months (Dec 2014 to Feb 2015)



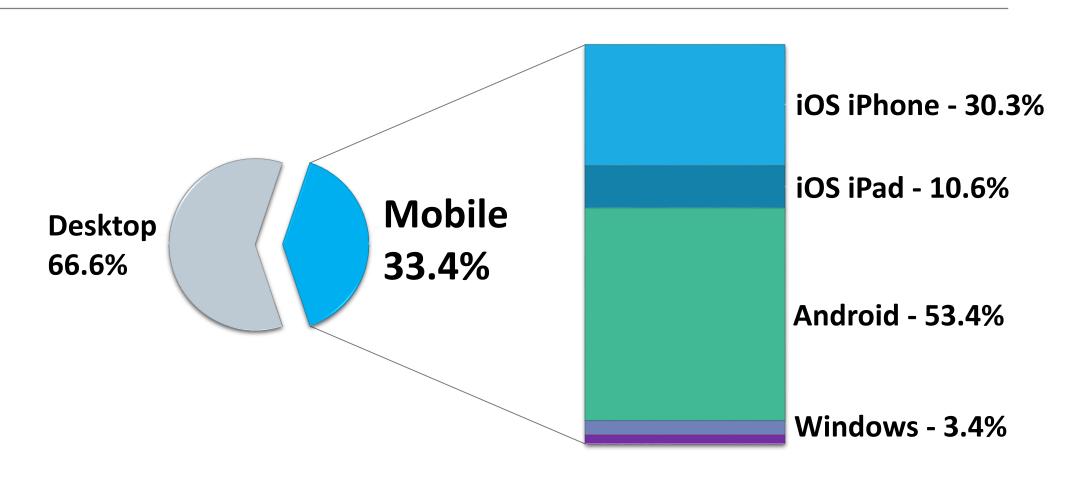
www.nd.gov

Total Sessions: Mar 2014 – Feb 2015



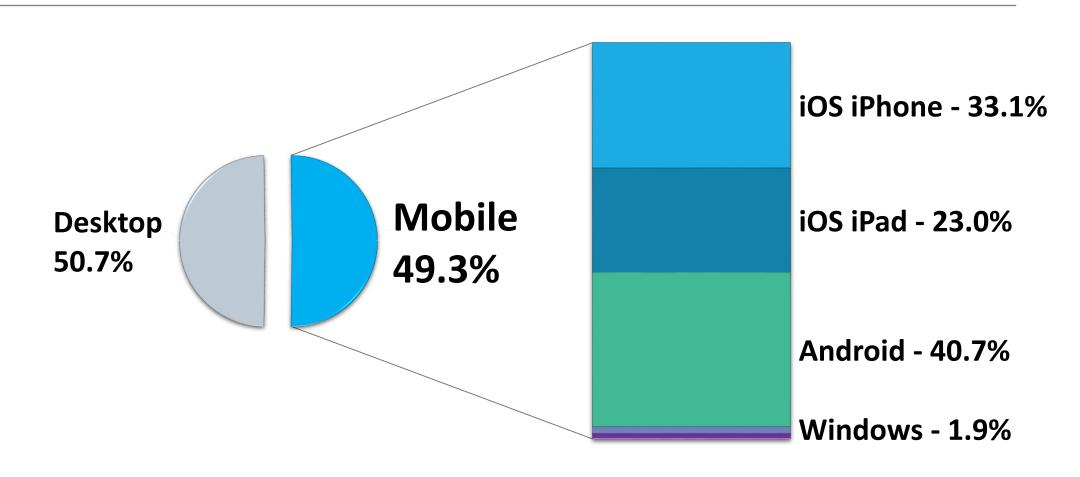
www.nd.gov/dhs

Total Sessions: Mar 2014 – Feb 2015



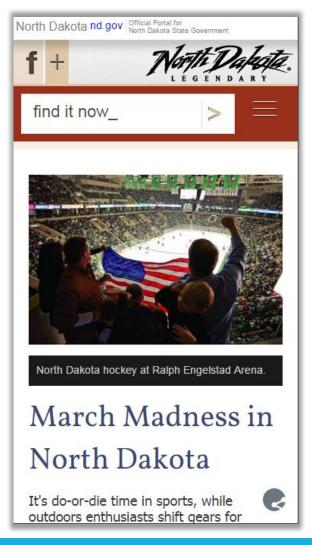
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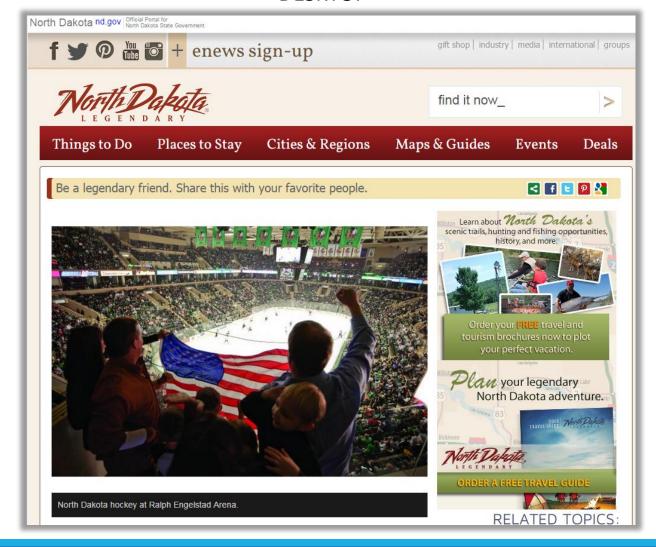


Websites - Responsive Design

MOBILE



DESKTOP



Websites - Responsive Design

Responsive Design - Web pages dynamical adapt to the device

Pros

- >Improves user experience across a range of devices
- Single website or application to create and maintain

Cons

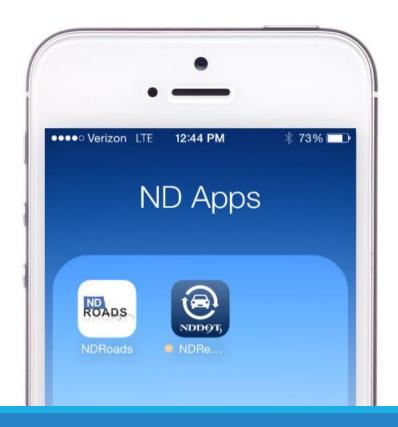
- >Adds design complexity and testing requirements
- ➤ May limit design options

Mobile Apps

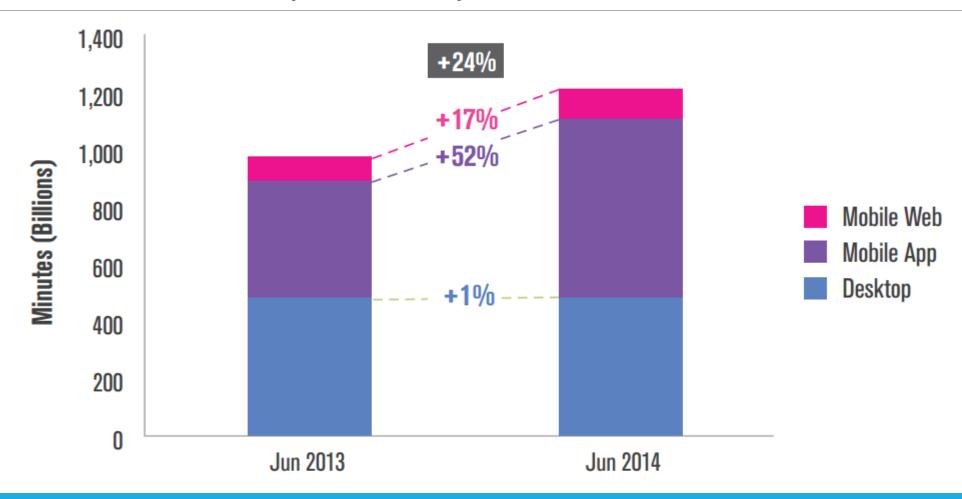
Quickly becoming the first choice for digital services

Apps available:

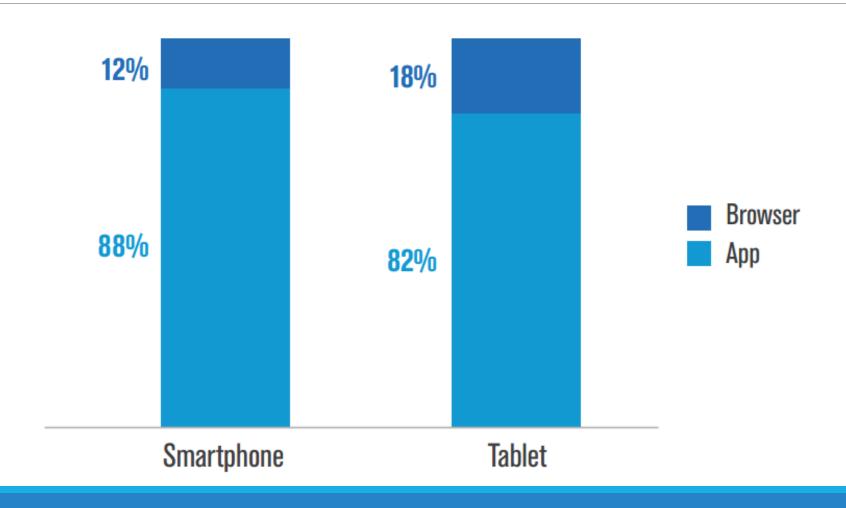
- ➤ Apple App Store 1.3M
- ➤ Google Play 1.3M
- ➤ Microsoft 300K



Total Time Spent by Source



Mobile App vs. Browser



Mobile Choices - Mobile Applications

Hybrid Applications

- Utilize web technologies (HTML/CSS/JavaScript)
- Single codebase can support multiple platforms

Native Applications

- > Requires the utilization of platform specific technologies
- Unique codebase for each platform

Mobile Applications

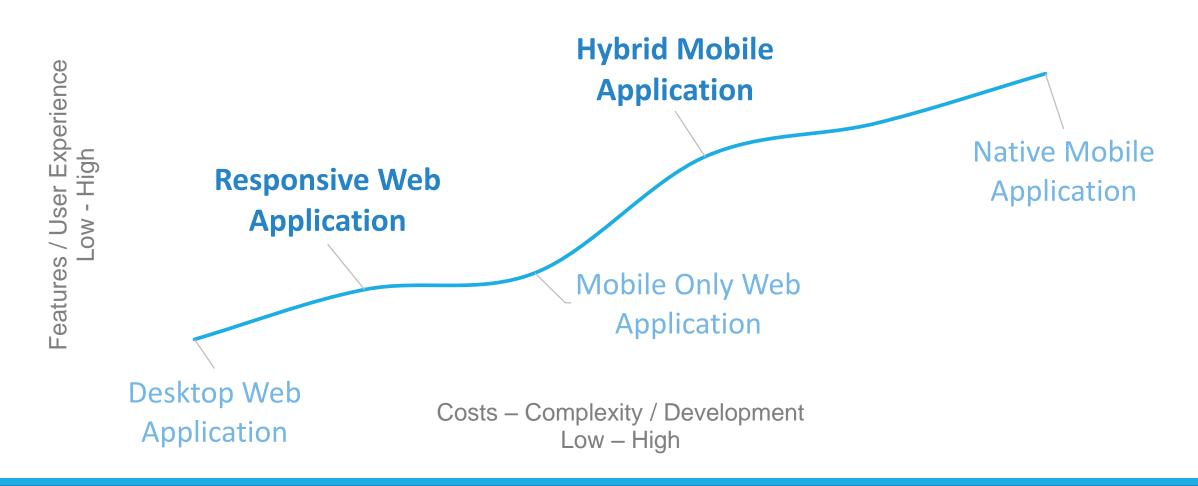
Pros

- Provision from device App stores
- Can leverage all device features
- > User Interface designed specifically for mobile devices

Cons

- > Separate application to maintain and support
- Must abide by App store rules

Mobile Options Features / User Experience vs. Costs



Mobile Application Demo

NDDOT - NDRenewals

- Hybrid Mobile Application
- >iOS and Android
- Utilizes existing backend services
- > Leverages device push notifications



Mobile Opportunities

- Utilize responsive design for new websites and applications
- > Evaluate updating existing websites and applications
- > Identify potential business cases for mobile devices
- Leverage device features:
 - **Camera**
 - **≻** Geolocation
 - > Push notifications

Questions?